

Please type a plus sign (+) inside this box → ☐

PTO/SB/05 (12/97)

Approved for use through 09/30/00. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL <small>(Only) for new nonprovisional applications under 37 CFR 1.53(b)</small>	Attorney Docket No. X-12150A	
	First Named Inventor or Application Identifier	
	Macklin Brian Arnold et al.	
	Express Mail Label No.	EL230529741US

Application Elements See MPEP chapter 600 concerning utility patent application contents.	ADDRESS TO: Commissioner for Patents Mail Stop Patent Application P.O. Box 1450 Alexandria, VA 22313-1450
---	---

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Fee Transmittal Form (original, and a duplicate for fee processing) (Submit an original, and a duplicate for fee processing) | 6. <input type="checkbox"/> Microfiche Computer Program (Appendix) |
| 2. <input checked="" type="checkbox"/> Specification [Total Pages 117]
(preferred arrangement set forth below) | 7. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) |
| - Descriptive title of the Invention | a. <input type="checkbox"/> Computer Readable Copy |
| - Cross References to Related Applications | b. <input type="checkbox"/> Paper Copy (identical to computer copy) |
| - Statement Regarding Fed sponsored R & D | c. <input type="checkbox"/> Statement verifying identity of above copies |
| - Reference to Microfiche Appendix | |
| - Background of the Invention | |
| - Brief Summary of the Invention | |
| - Brief Description of the Drawings (if filed) | |
| - Detailed Description | |
| - Claims | |
| - Abstract of the Disclosure | |
| 3. <input type="checkbox"/> Drawing(s) (35 USC 113) [Total Sheets 8] | |
| 4. Oath or Declaration [Total Pages 8] | |
| a. <input type="checkbox"/> Newly executed (original or copy) | |
| b. <input checked="" type="checkbox"/> Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 17 completed) [Note Box 5 below] | |
| i. <input type="checkbox"/> DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b) | |
| 5. <input checked="" type="checkbox"/> Incorporation By Reference (useable if Box 4b is checked) The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein. | |

ACCOMPANYING APPLICATION PARTS

- | | |
|---|--|
| 8. <input type="checkbox"/> | Assignment Papers (cover sheet & document(s)) |
| 9. <input type="checkbox"/> | 37 CFR 3.73(b) Statement (when there is an assignee) <input type="checkbox"/> Power of Attorney |
| 10. <input type="checkbox"/> | English Translation Document (if applicable) |
| 11. <input checked="" type="checkbox"/> | Information Disclosure Statement (IDS)/PTO-1449 <input type="checkbox"/> Copies of IDS Citations |
| 12. <input checked="" type="checkbox"/> | Preliminary Amendment |
| 13. <input checked="" type="checkbox"/> | Return Receipt Postcard (MPEP 503) (Should be specifically itemized) |
| 14. <input type="checkbox"/> | Small Entity Statement(s) <input type="checkbox"/> Statement filed in prior application, Status still proper and desired |
| 15. <input type="checkbox"/> | Certified Copy of Priority Document(s) (if foreign priority is claimed) |
| 16. <input type="checkbox"/> | Other: |

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:		
<input type="checkbox"/> Continuation	<input checked="" type="checkbox"/> Divisional	<input type="checkbox"/> Continuation-in-part (CIP) of prior application No: 09/744,412 filed January 23, 2001 which is a 371 of PCT/US99/17126 filed July 28, 1999 which claims priority to US Provisional Application No. 60/094,997 filed July 31, 1998

18. CORRESPONDENCE ADDRESS

Customer Number or Bar Code Label	(Insert Customer No. Or Attach bar code label here)	or	Correspondence address below
-----------------------------------	---	----	------------------------------

Eli Lilly and Company	
ADDRESS	
Patent Division P.O. Box 6288	



25885

PATENT TRADEMARK OFFICE

CITY	Indianapolis	STATE	Indiana	ZIP CODE	46206-6288
COUNTRY	U.S.A.	TELEPHONE	317-276-1207	FAX	317-276-3861
SUBMITTED BY				Complete (if applicable)	
Typed or Printed Name				Reg. Number	
NELSEN L. LENTZ				38,537	
Signature				Date	
[Signature]				7/11/03	
"Express Mail" mailing label number				EL230529741US	
Date of Deposit					
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.					
Printed Name				Signature	
[Signature]				[Signature]	

Please type a plus sign (+) inside this box → ☐

PTO/SB/17 (12/97)

Approved for use through 09/30/00. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL				Complete if Known																																																																																																																																																																															
Note: Effective November 10, 1997. Patent fees are subject to annual revision.				Application Number _____ Filing Date _____ First Named Inventor Macklin Brian Arnold et al Group Art Unit _____ Examiner Name _____ Attorney Docket Number X-12150A																																																																																																																																																																															
TOTAL AMOUNT OF PAYMENT		(\$) 918.00																																																																																																																																																																																	
METHOD OF PAYMENT (check one)				FEE CALCULATION (continued)																																																																																																																																																																															
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to: Deposit Account Number: 05-0840 Deposit Account Name: Eli Lilly and Company <input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17 <input type="checkbox"/> Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance				3. ADDITIONAL FEES <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge-late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge-late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>410</td><td>216</td><td>205</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>930</td><td>217</td><td>465</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,450</td><td>218</td><td>725</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,970</td><td>228</td><td>985</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive-unavoidable</td><td></td></tr> <tr><td>141</td><td>1,300</td><td>241</td><td>650</td><td>Petition to revive-unintentional</td><td></td></tr> <tr><td>142</td><td>1,300</td><td>242</td><td>650</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>470</td><td>243</td><td>235</td><td>Design Issue Fee</td><td></td></tr> <tr><td>144</td><td>630</td><td>244</td><td>315</td><td>Plant Issue Fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt.</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>750</td><td>246</td><td>375</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>750</td><td>249</td><td>375</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> </tbody> </table>		Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	105	130	205	65	Surcharge-late filing fee or oath		127	50	227	25	Surcharge-late provisional filing fee or cover sheet		139	130	139	130	Non-English specification		147	2,520	147	2,520	For filing a request for reexamination		112	920*	112	920*	Requesting publication of SIR prior to Examiner action		113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action		115	110	215	55	Extension for reply within first month		116	410	216	205	Extension for reply within second month		117	930	217	465	Extension for reply within third month		118	1,450	218	725	Extension for reply within fourth month		128	1,970	228	985	Extension for reply within fifth month		119	320	219	160	Notice of Appeal		120	320	220	160	Filing a brief in support of an appeal		121	280	221	140	Request for oral hearing		138	1,510	138	1,510	Petition to institute a public use proceeding		140	110	240	55	Petition to revive-unavoidable		141	1,300	241	650	Petition to revive-unintentional		142	1,300	242	650	Utility issue fee (or reissue)		143	470	243	235	Design Issue Fee		144	630	244	315	Plant Issue Fee		122	130	122	130	Petitions to the Commissioner		123	50	123	50	Petitions related to provisional applications		126	180	126	180	Submission of Information Disclosure Stmt.		581	40	581	40	Recording each patent assignment per property (times number of properties)		146	750	246	375	Filing a submission after final rejection (37 CFR 1.129(a))		149	750	249	375	For each additional invention to be examined (37 CFR 1.129(b))		179	740	279	370	Request for Continued Examination (RCE)		169	900	169	900	Request for expedited examination of a design application	
Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																														
105	130	205	65	Surcharge-late filing fee or oath																																																																																																																																																																															
127	50	227	25	Surcharge-late provisional filing fee or cover sheet																																																																																																																																																																															
139	130	139	130	Non-English specification																																																																																																																																																																															
147	2,520	147	2,520	For filing a request for reexamination																																																																																																																																																																															
112	920*	112	920*	Requesting publication of SIR prior to Examiner action																																																																																																																																																																															
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action																																																																																																																																																																															
115	110	215	55	Extension for reply within first month																																																																																																																																																																															
116	410	216	205	Extension for reply within second month																																																																																																																																																																															
117	930	217	465	Extension for reply within third month																																																																																																																																																																															
118	1,450	218	725	Extension for reply within fourth month																																																																																																																																																																															
128	1,970	228	985	Extension for reply within fifth month																																																																																																																																																																															
119	320	219	160	Notice of Appeal																																																																																																																																																																															
120	320	220	160	Filing a brief in support of an appeal																																																																																																																																																																															
121	280	221	140	Request for oral hearing																																																																																																																																																																															
138	1,510	138	1,510	Petition to institute a public use proceeding																																																																																																																																																																															
140	110	240	55	Petition to revive-unavoidable																																																																																																																																																																															
141	1,300	241	650	Petition to revive-unintentional																																																																																																																																																																															
142	1,300	242	650	Utility issue fee (or reissue)																																																																																																																																																																															
143	470	243	235	Design Issue Fee																																																																																																																																																																															
144	630	244	315	Plant Issue Fee																																																																																																																																																																															
122	130	122	130	Petitions to the Commissioner																																																																																																																																																																															
123	50	123	50	Petitions related to provisional applications																																																																																																																																																																															
126	180	126	180	Submission of Information Disclosure Stmt.																																																																																																																																																																															
581	40	581	40	Recording each patent assignment per property (times number of properties)																																																																																																																																																																															
146	750	246	375	Filing a submission after final rejection (37 CFR 1.129(a))																																																																																																																																																																															
149	750	249	375	For each additional invention to be examined (37 CFR 1.129(b))																																																																																																																																																																															
179	740	279	370	Request for Continued Examination (RCE)																																																																																																																																																																															
169	900	169	900	Request for expedited examination of a design application																																																																																																																																																																															
2. <input type="checkbox"/> Payment Enclosed: <input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other				Other fee (specify) _____ Other fee (specify) _____ *Reduced by Basic Filing Fee Paid																																																																																																																																																																															
FEE CALCULATION																																																																																																																																																																																			
1. FILING FEE <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101</td><td>750</td><td>201</td><td>375</td><td>Utility filing fee</td><td>750</td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>520</td><td>207</td><td>260</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>750</td><td>208</td><td>375</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> </tbody> </table>				Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid	101	750	201	375	Utility filing fee	750	106	330	206	165	Design filing fee		107	520	207	260	Plant filing fee		108	750	208	375	Reissue filing fee		114	160	214	80	Provisional filing fee																																																																																																																																													
Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid																																																																																																																																																																														
101	750	201	375	Utility filing fee	750																																																																																																																																																																														
106	330	206	165	Design filing fee																																																																																																																																																																															
107	520	207	260	Plant filing fee																																																																																																																																																																															
108	750	208	375	Reissue filing fee																																																																																																																																																																															
114	160	214	80	Provisional filing fee																																																																																																																																																																															
SUBTOTAL (1)				(\$) 750.00																																																																																																																																																																															
2. CLAIMS <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Total Claims</th> <th>Extr a</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>14</td><td>-20**=</td><td>0</td><td>X 18 = 0</td></tr> <tr><td>5</td><td>-3**=</td><td>2</td><td>X 84 = 168</td></tr> <tr><td>Multiple Dependent Claims (first time)</td><td></td><td>X 280 =</td><td></td></tr> </tbody> </table>				Total Claims	Extr a	Fee from below	Fee Paid	14	-20**=	0	X 18 = 0	5	-3**=	2	X 84 = 168	Multiple Dependent Claims (first time)		X 280 =																																																																																																																																																																	
Total Claims	Extr a	Fee from below	Fee Paid																																																																																																																																																																																
14	-20**=	0	X 18 = 0																																																																																																																																																																																
5	-3**=	2	X 84 = 168																																																																																																																																																																																
Multiple Dependent Claims (first time)		X 280 =																																																																																																																																																																																	
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Large Fee Code</th> <th>Entity Fee (\$)</th> <th>Small Fee Code</th> <th>Entity Fee (\$)</th> <th>Fee Description</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim</td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>Reissue independent claims over original patent</td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>Reissue claims in excess of 20 and over original patent</td></tr> </tbody> </table>				Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	103	18	203	9	Claims in excess of 20	102	84	202	42	Independent claims in excess of 3	104	280	204	140	Multiple dependent claim	109	84	209	42	Reissue independent claims over original patent	110	18	210	9	Reissue claims in excess of 20 and over original patent																																																																																																																																																		
Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description																																																																																																																																																																															
103	18	203	9	Claims in excess of 20																																																																																																																																																																															
102	84	202	42	Independent claims in excess of 3																																																																																																																																																																															
104	280	204	140	Multiple dependent claim																																																																																																																																																																															
109	84	209	42	Reissue independent claims over original patent																																																																																																																																																																															
110	18	210	9	Reissue claims in excess of 20 and over original patent																																																																																																																																																																															
SUBTOTAL (2)				(\$) 168.00																																																																																																																																																																															
**or number previously paid, if greater; For Reissues, see above																																																																																																																																																																																			
SUBTOTAL (3)				(\$) 0.00																																																																																																																																																																															
SUBMITTED BY				Complete (if applicable)																																																																																																																																																																															
Typed or Printed Name: NELSEN L. LENTZ				Reg. Number: 38,537																																																																																																																																																																															
Signature: <i>Nelsen L. Lentz</i>				Date: 6/30/03																																																																																																																																																																															
"Express Mail" mailing label number: EL230529741US																																																																																																																																																																																			
Date of Deposit: 7-03-03																																																																																																																																																																																			
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22304-4500.																																																																																																																																																																																			
Printed Name: Queen				Signature: <i>Queen</i>																																																																																																																																																																															

21908 U.S. PTO
 10/613684
 07/03/03

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						